Pollution Prevention Plan

for

Otter Brook Lake

APPENDICES

July 1996

US Army Corps
of Engineers
New England Division

POLLUTION PREVENTION PLAN

APPENDICES

LOCATION:

OTTER BROOK LAKE
KEENE AND ROXBURY, NEW HAMPSHIRE

PREPARED BY:

ENGINEERING DIRECTORATE
WATER CONTROL DIVISION
ENVIRONMENTAL ENGINEERING
AND HYDRAULICS BRANCH

US Army Corps
of Engineers
New England Division

POLLUTION PREVENTIOIN PLAN
APPENDICES

Following are appendices for the Otter Brook Lake Pollution Prevention Plan. Appendices A, B, C, and D are available at the project and will be inserted by the basin manager.

Appendix	Subject
A	Figures
	1 Otter Brook Lake Location Map
	2 Connecticut River Basin Map
	3 Otter Brook Lake Reservoir Map
	4 Locations of Oil Storage Tanks
B	Oil Storage Tank Inventory
C	Chemical Product Inventory
D	Listing of Oil and Hazardous Substances and Reportable Quantities
D1	Oil and Other Petroleum Products Stored at Otter Brook Lake
D2	List of Hazardous Wastes per New Hampshire Hazardous Waste Rules, Chapter Env-Wm 400
D3	List of Hazardous Substances and Reportable Quantities per 40 CFR 302
E	Project Activities and Related Wastes
F	Otter Brook Lake's Pollution Prevention Strategy Sheet
G	Recyclable Items at Otter Brook Lake
H	State of New Hampshire Governor's Recycling Program
I	Pollution Prevention Technical Assistance Programs
J	Defense Logistic Agency Centers

Appendix A

Figures

Appendix B

Oil Storage Tank Inventory

Appendix C

Chemical Product Inventory

Appendix D

Listing of Oil and Hazardous Substances
and Reportable Quantities

Appendix D1

Oil and Other Chemical Products
Stored at Otter Brook Lake

Appendix D2

List of Hazardous Wastes per New Hampshire
Hazardous Waste Rules, Chapter Env-Wm 400

Appendix E

Project Activities and Related Wastes

PROJECT ACTIVITIES AND RELATED WASTES

Process Source	Waste Examples
Air Emissions	
Painting Volatiles	Paint VOCs
Solvent Volatiles	Solvent VOCs
Vehicle Emissions	Carbon Monoxide
Other Air Emissions	Asbestos
Hazardous Wastes	
Chemical Paint Stripping	Paint Strippers, paint sludge
Products with Expired Shelf Life	Expired shelf life wastes such as paints, solvents, cleaning materials, etc.
Fluid Change Out/Purging & Vehicle Maintenance	Oily waste, lubricating oil, hydraulic fluid, contaminated fuel, brake fluid, antifreeze, windshield washer fluid, automobile batteries
Facility/Project Lands Maintenance	Cleaning supplies/chemicals, fertilizer, signs, yard refuse, illegally dumped waste (tires, roofing shingles, etc.)
inting Operations	Paint, paint sludges
Spill Cleanup	Absorbent, rags, booms, pigs, drip pans, contaminated soil
Solvents/Degreasing/Cleaning	Cleaning solvents, Methyl Ethyl Ketone (MEK)
Transformer Replacement	PCBs
Pesticide/Herbicide Treatment	Pesticide/herbicide waste
Equipment/Machine Maintenance	Cleaning solvents, lubricating oils & greases
Other Wastes	
Office Operation	Paper, shipping and packing materials, newspapers, containers (plastic, glass, metal), household batteries, fluorescent lamps & ballasts
Log Boom	Wood, miscellaneous debris
Public Use Areas (Picnic & Swimming Areas, etc.)	Miscellaneous wastes, containers (plastic, glass, metal), paper products
Construction/Renovation	Asphalt, construction debris (concrete, lumber, etc.)

Appendix F

Otter Brook Lake's Pollution Prevention
Strategy Sheet

OTTER BROOK LAKE'S POLLUTION PREVENTION STRATEGY SHEET

GOAL	ESTABLISHED BY	TARGET DATE
Contribute to the 25 to 50% reduction of the total waste stream within the Upper Connecticut River Basin.	NED	1999
Reduce all hazardous substances/wastes located at Otter Brook Lake to quantities below reportable quantities/limits that are set by the NH DES.	NED	1999
Provide approved secondary containment structures for all chemical/oil storage tanks located at Otter Brook Lake.	NED	1999
Reduce solid wastes at the project by 70%	Otter Brook Lake	1999

Appendix G

Recyclable Items at Otter Brook Lake

RECYCLABLE ITEMS AT OTTER BROOK LAKE

Operation	Recyclable	Description
Office Operation	Paper	-High grade office paper (computer paper, stationary bond, copy machine paper, miscellaneous plain paper) -Newspaper -Magazines -Cardboard
	Food and Drink Containers	-Glass -Metal (aluminum, tin) -Plastic - Polyethylene Terephthalate (PET), High Density Polyethylene (HDPE), Polyvinyl Chloride (PVC), Low Density Polyethylene (LDPE), Polypropylene (PP), Polystyrene (PS), Other -Aseptic packaging (paper milk cartons, drink boxes)
	Batteries (other than car batteries)	-Nickel cadmium batteries
Equipment/Vehicle Maintenance	Motor Oil	
	Antifreeze	
	Car Batteries	
	Tires	
Construction/ Renovation	Construction and Demolition Debris	-Asphalt, bricks, concrete (ABC), soil, rock, wall coverings, drywall, plumbing fixtures, insulation, roofing shingles, glass, metal, wood waste, electrical wires
Facility/Project Maintenance	Yard Waste & Composting	-Prunings, bulky wood yard waste (e.g. trees, large branches, and stumps), leaves, grass clippings

Appendix H

State of New Hampshire
Governor's Recycling Program

FAX COVER SHEET

STATE OF NEW HAMPSHIRE
Governor's Recycling Program
Office of State Planning
2½ Beacon Street, Concord, NH 03301-4497
Telephone: (603) 271-1098 FAX: (603) 271-1728

DATE: April 24, 1996

TO: US Army Corps of Engineers
Attention Alex

FAX NO: (617) 647-8639

FROM: Denise Adjutant, Executive Secretary

NUMBER OF PAGES (INCLUDING COVERSHEET): 1

COMMENTS/INSTRUCTIONS:

GOVERNOR'S RECYCLING PROGRAM
2½ Beacon Street
Concord, NH 03301-4497
Telephone: (603) 271-1098
Fax: (603) 271-1728

The Governor's Recycling Program (GRP) began in July of 1989 with $1.5 million available to assist municipalities capitalize their recycling programs. Although the grants program has been closed out, the GRP provides technical assistance, stimulates and promotes new recycling ideas, and has developed databases on municipal recycling activities in New Hampshire and markets for the state's recyclables.

Appendix I

Pollution Prevention
Technical Assistance Programs

Pollution Prevention
Technical Assistance Programs

Pollution Prevention Information Clearinghouse (PPIC)
U.S. Environmental Protection Agency
PM 211-A
401 M Street, SW
Washington, DC 20460
202-260-1023

The PPIC has pollution prevention information, a telephone reference and referral system, and a computerized information exchange system.

Pollution Prevention Information Exchange System (PIES)
EPA Systems Development Center
200 N. Glebe Road
Arlington, VA 22203
703-506-1025 (modem)

PIES is a free, 24 hour accessible network consisting of management centers, bulletins, technical data bases, case studies, and issue specific conference listings.

Federal Agency Mini-Exchange (FAME)
EPA Systems Development Center
200 N. Glebe Road
Arlington, VA 22203
703-506-1025 (modem)

FAME is a database on the PIES that provides information on pollution prevention/recycling efforts at federal facilities.

Defense Environmental Network and Information Exchange (DENIX)
DECIM Office
Hoffman 2, Room 12S49
200 Stovall Street
Alexandria, VA 22332
1-800-642-3332
703-325-0002

DENIX is a DOD communications platform for the dissemination and exchange of environmental information across all DOD components.

Center for Environmental Research Information (CERI)
Dorothy Williams
U.S. Environmental Protection Agency
Center for Environmental Research Information
26 West Martin Luther King Drive
Cincinnati, OH 45268
513-569-7562

CERI serves as the exchange of scientific and technical information produced by EPA in brochures, capsule and summary reports, handbooks, newsletters, project reports, and manuals.

Appendix J

Defense Logistic Agency Centers

December 1995

Chemical Alternatives, Recyclers, Aircraft Cleaners and more . . .

AROUND THE CLOCK, AROUND THE WORLD

DEFENSE
LOGISTICS
AGENCY

2nd Edition

This catalog has been expanded to include products from throughout the Defense Logistics Agency.

DLA offers more

Environmental products

The Defense Logistics Agency has hundreds of environmental products in its supply system ranging from citrus-based degreasers and complete antifreeze recycling systems to natural resource conservation products.

Purchasing these products can help you meet your organization's goals in:

- Reducing hazardous waste
- Eliminating use of ozone-depleting chemicals
- Protecting your employees, and
- Saving money

Many different units of issue are available to help ensure you buy only what you need. Most of these items can be shipped directly from the supplier to your location.

DLA has done the cataloging, item management and contracting for you and can ensure you receive the benefit of its purchasing power.

This catalog is divided into broad headings describing the types of products to assist you in selecting possible alternatives to hazardous chemicals or processes in use now.

For more information about environmental products, check the guide in this catalog and then call one of DLA's representatives today!

How do I order from DLA?

Preferred methods:

Automated systems using MILSTRIP/FEDSTRIP
or
GSA's Muffin System

Alternative methods:

Contact the appropriate inventory control point via:

FAX
Mail
ESEX
Internet home page address:
http://www.dscr.dla.mil

New environmental products are identified daily

DLA strives to meet its customers' needs by staying abreast of the latest technology and making new products available through the federal supply system. If you know of products which would be appropriate for inclusion in future editions, we want to hear from you!

If the product falls under one of the categories in this catalog, contact the technical or marketing representative at the appropriate supply center shown on pages *ii* and *iii*. In all other cases, contact contact the Defense Logistics Services Center, Battle Creek, Mich.

616-961-4958 or 5729	(Commercial)
932-4958 or 5729	(DSN)
932-5305	(FAX)

Reminder: Check with the process owner, engineering support activity, etc., before substituting an environmental product for a specified hazardous item.

S9E

Defense Electronics Supply Center
1507 Wilmington Pike
Dayton, Ohio 45444-5160

For more information on: Miscellaneous energy-saving devices for ADP equipment

Call:

Marketing ..... 1-800-643-8825 ... DSN 986-6425..... FAX 1-800-643-8827

S9F

Defense Fuel Supply Center
8725 John J. Kingman Road, Suite 2941
Fort Belvoir, Va. 22060-6221

For more information on: Bulk petroleum, oils and lubricants

Call:

Chemist ..... 703-767-8358 ... DSN 427-8358..... FAX 703-767-8366
Item Manager ..... 703-767-9262 ... DSN 427-9262..... FAX 703-767-9269
Marketing ..... 703-767-8377 ... DSN 427-8377..... FAX 703-767-8366

S9I

Defense Industrial Supply Center
700 Robbins Avenue
Philadelphia, Pa. 19111-5096

For more information on: Gaskets, fasteners, packing

Call

Technical Support..... 215-697-0930 ... DSN 442-0930... E-Mail srigefsky@disc.dla.mil
215-697-4534 ... DSN 442-6671.... E-Mail kmaute@disc.dla.mil
Material Branch ..... 215-697-1172 ... DSN 442-1172

Many commodities managed by the Defense Industrial Supply Center contain materials hazardous to personnel, the environment, or both. These materials include asbestos, cadmium and ozone depleting substances. They may be contained in the products the center manages and procures or in the manufacturing or testing process for products it buys.

DISC has an aggressive program to develop and secure Service approval for replacements for many of its commodities which formerly utilized hazardous materials. Once a replacement has been developed and approved by the Service, the center no longer offers the hazardous stock number to its customers.

An Asbestos Bulletin Board System is in place which will assist you in identifying DISC-managed national stock numbers that contain asbestos. Non-asbestos replacements are listed with the asbestos parts. Anyone with a computer and modem can access the system at 215-697-2340 or DSN 442-2340.

DISC will continue its program to develop additional non-hazardous replacements with the intent of replacing all hazardous related commodities with those that do not use hazardous materials in either the product or its manufacturing process.

S9C

Defense Supply Center Columbus
P. O. Box 3990
Columbus, Ohio 43216-5000

For more information on: Pest management equipment
Natural resource conservation products
Firefighting equipment

Call:

Hazardous Materials Minimization Program	614-692-4249	DSN 850-4249	FAX 614-692-1753
Item Manager	614-692-2860	DSN 850-2860	FAX 614-692-2862
Marketing	614-692-1858	DSN 850-1858	FAX 614-692-1293

S9G

Defense Supply Center Richmond
8000 Jefferson Davis Highway
Richmond, Va. 23297-5100

For more information on:

- Aqueous cleaners/degreasers
- Semi-aqueous cleaners/degreasers
- Hydrocarbon-based or other cleaners/degreasers
- Aircraft cleaning compounds
- Spill control products
- Skin protection barrier products
- Cold climate applications
- Support equipment/recycling products
- Marine cleaning compounds
- Remanufactured/recycled laser printer toner cartridges
- Packaged petroleum, oils, and lubricants
- Pesticides

Call:

Hazardous Technical Information Services	1-800-848-4847	DSN 695-5168	email gss5089@dscr.dla.mil
Chemicals			
Technical	804-279-3995	DSN 695-3995	FAX DSN 695-6008
Item Manager	804-279-3540	DSN 695-3540	FAX DSN 695-4403
Petroleum Products			
Technical	804-279-4257	DSN 695-4257	FAX DSN 695-6418
Item Manager	804-279-3024	DSN 695-3024	FAX DSN 695-3971
Marketing	1-800-352-2852	DSN 695-6054	FAX 1-800-352-3291 FAX DSN 685-5695

Appendix K

Executive Order 12856

THE EXECUTIVE ORDER

Federal Register
Vol. 58, No. 150
Friday, August 6, 1993

Presidential Documents

Title 3—
The President

Executive Order 12856 of August 3, 1993

Federal Compliance With Right-to-Know Laws and Pollution Prevention Requirements

WHEREAS, the Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C. 11001–11050) (EPCRA) established programs to provide the public with important information on the hazardous and toxic chemicals in their communities, and established emergency planning and notification requirements to protect the public in the event of a release of extremely hazardous substances;

WHEREAS, the Federal Government should be a good neighbor to local communities by becoming a leader in providing information to the public concerning toxic and hazardous chemicals and extremely hazardous substances at Federal facilities, and in planning for and preventing harm to the public through the planned or unplanned releases of chemicals;

WHEREAS, the Pollution Prevention Act of 1990 (42 U.S.C. 13101-13109) (PPA) established that it is the national policy of the United States that whenever feasible, pollution should be prevented or reduced at the source, that pollution that cannot be prevented should be recycled in an environmentally safe manner; that pollution that cannot be prevented or recycled should be treated in an environmentally safe manner; and that disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner;

WHEREAS, the PPA required the Administrator of the Environmental Protection Agency (EPA) to promote source reduction practices in other agencies;

WHEREAS, the Federal Government should become a leader in the field of pollution prevention through the management of its facilities, its acquisition practices, and in supporting the development of innovative pollution prevention programs and technologies;

WHEREAS, the environmental, energy, and economic benefits of energy and water use reductions are very significant; the scope of innovative pollution prevention programs must be broad to adequately address the highest-risk environmental problems and to take full advantage of technological opportunities in sectors other than industrial manufacturing; the Energy Policy Act of 1992 (Public Law 102–486 of October 24, 1992) requires the Secretary of Energy to work with other Federal agencies to significantly reduce the use of energy and reduce the related environmental impacts by promoting use of energy efficiency and renewable energy technologies; and

WHEREAS, as the largest single consumer in the Nation, the Federal Government has the opportunity to realize significant economic as well as environmental benefits of pollution prevention;

AND IN ORDER TO:

Ensure that all Federal agencies conduct their facility management and acquisition activities so that, to the maximum extent practicable, the quantity of toxic chemicals entering any wastestream, including any releases to the environment, is reduced as expeditiously as possible through source reduction; that waste that is generated is recycled to the maximum extent practicable; and that any wastes remaining are stored, treated or disposed of in a manner protective of public health and the environment;

Require Federal agencies to report in a public manner toxic chemicals entering any wastestream from their facilities, including any releases to the environment, and to improve local emergency planning, response, and accident notification; and

Help encourage markets for clean technologies and safe alternatives to extremely hazardous substances or toxic chemicals through revisions to specifications and standards, the acquisition and procurement process, and the testing of innovative pollution prevention technologies at Federal facilities or in acquisitions;

NOW THEREFORE, by the authority vested in me as President by the Constitution and the laws of the United States of America, including the EPCRA, the PPA, and section 301 of title 5, United States Code, it is hereby ordered as follows:

Section 1. *Applicability.*

1-101. As delineated below, the head of each Federal agency is responsible for ensuring that all necessary actions are taken for the prevention of pollution with respect to that agency's activities and facilities, and for ensuring that agency's compliance with pollution prevention and emergency planning and community right-to-know provisions established pursuant to all implementing regulations issued pursuant to EPCRA and PPA.

1 102. Except as otherwise noted, this order is applicable to all Federal agencies that either own or operate a "facility" as that term is defined in section 329(4) of EPCRA, if such facility meets the threshold requirements set forth in EPCRA for compliance as modified by section 3-304(b) of this order ("covered facilities"). Except as provided in section 1-103 and section 1-104 below, each Federal agency must apply all of the provisions of this order to each of its covered facilities, including those facilities which are subject, independent of this order, to the provisions of EPCRA and PPA (*e.g.*, certain Government-owned/contractor-operated facilities (GOCO's), for chemicals meeting EPCRA thresholds). This order does not apply to Federal agency facilities outside the customs territory of the United States, such as United States diplomatic and consular missions abroad.

1-103. Nothing in this order alters the obligations which GOCO's and Government corporation facilities have under EPCRA and PPA independent of this order or subjects such facilities to EPCRA or PPA if they are otherwise excluded. However, consistent with section 1-104 below, each Federal agency shall include the releases and transfers from all such facilities when meeting all of the Federal agency's responsibilities under this order.

1-104. To facilitate compliance with this order, each Federal agency shall provide, in all future contracts between the agency and its relevant contractors, for the contractor to supply to the Federal agency all information the Federal agency deems necessary for it to comply with this order. In addition, to the extent that compliance with this order is made more difficult due to lack of information from existing contractors, Federal agencies shall take practical steps to obtain the information needed to comply with this order from such contractors.

Sec. 2-2. *Definitions.*

2-201. All definitions found in EPCRA and PPA and implementing regulations are incorporated in this order by reference, with the following exception: for the purposes of this order, the term "person", as defined in section 329(7) of EPCRA, also includes Federal agencies.

2-202. *Federal agency* means an Executive agency, as defined in 5 U.S.C. 105. For the purpose of this order, military departments, as defined in 5 U.S.C 102, are covered under the auspices of the Department of Defense.

2-203. *Pollution Prevention* means "source reduction," as defined in the PPA, and other practices that reduce or eliminate the creation of pollutants through: (a) increased efficiency in the use of raw materials, energy, water, or other resources; or (b) protection of natural resources by conservation.

2-204. *GOCO* means a Government-owned/contractor-operated facility which is owned by the Federal Government but all or portions of which are operated by private contractors.

2-205. *Administrator* means the Administrator of the EPA.

2-206. *Toxic Chemical* means a substance on the list described in section 313(c) of EPCRA.

2-207. *Toxic Pollutants.* For the purposes of section 3-302(a) of this order, the term "toxic pollutants" shall include, but is not necessarily limited to, those chemicals at a Federal facility subject to the provisions of section 313 of EPCRA as of December 1, 1993. Federal agencies also may choose to include releases and transfers of other chemicals, such as "extremely hazardous chemicals" as defined in section 329(3) of EPCRA, hazardous wastes as defined under the Resource Conservation and Recovery Act of 1976 (42 U.S.C 6901–6986) (RCRA), or hazardous air pollutants under the Clean Air Act Amendments (42 U.S.C. 7403-7626); however, for the purposes of establishing the agency's baseline under 3-302(c), such "other chemicals" are in addition to (not instead of) the section 313 chemicals. The term "toxic pollutants" does not include hazardous waste subject to remedial action generated prior to the date of this order.

Sec. 3-3. *Implementation.*

3-301. *Federal Agency Strategy.* Within 12 months of the date of this order, the head of each Federal agency must develop a written pollution prevention strategy to achieve the requirements specified in sections 3-302 through 3–305 of this order for that agency. A copy thereof shall be provided to the Administrator. Federal agencies are encouraged to involve the public in developing the required strategies under this order and in monitoring their subsequent progress in meeting the requirements of this order. The strategy shall include, but shall not be limited to, the following elements:

(a) A pollution prevention policy statement, developed by each Federal agency, designating principal responsibilities for development, implementation, and evaluation of the strategy. The statement shall reflect the Federal agency's commitment to incorporate pollution prevention through source reduction in facility management and acquisition, and it shall identify an individual responsible for coordinating the Federal agency's efforts in this area.

(b) A commitment to utilize pollution prevention through source reduction, where practicable, as the primary means of achieving and maintaining compliance with all applicable Federal, State, and local environmental requirements.

3-302. Toxic Chemical Reduction Goals. (a) The head of each Federal agency subject to this order shall ensure that the agency develops voluntary goals to reduce the agency's total releases of toxic chemicals to the environment and off-site transfers of such toxic chemicals for treatment and disposal from facilities covered by this order by 50 percent by December 31, 1999. To the maximum extent practicable, such reductions shall be achieved by implementation of source reduction practices.

(b) The baseline for measuring reductions for purposes of achieving the 50 percent reduction goal for each Federal agency shall be the first year in which releases of toxic chemicals to the environment and off-site transfers of such chemicals for treatment and disposal are publicly reported. The baseline amount as to which the 50 percent reduction goal applies shall be the aggregate amount of toxic chemicals reported in the baseline year for all of that Federal agency's facilities meeting the threshold applicability requirements set forth in section 1-102 of this order. In no event shall the baseline be later than the 1994 reporting year.

(c) Alternatively, a Federal agency may choose to achieve a 50 percent reduction goal for toxic pollutants. In such event, the Federal agency shall delineate the scope of its reduction program in the written pollution prevention strategy

that is required by section 3-301 of this order. The baseline for measuring reductions for purposes of achieving the 50 percent reduction requirement for each Federal agency shall be the first year in which releases of toxic pollutants to the environment and off-site transfers of such chemicals for treatment and disposal are publicly reported for each of that Federal agency's facilities encompassed by section 3-301. In no event shall the baseline year be later than the 1994 reporting year. The baseline amount as to which the 50 percent reduction goal applies shall be the aggregate amount of toxic pollutants reported by the agency in the baseline year. For any toxic pollutants included by the agency in determining its baseline under this section, in addition to toxic chemicals under EPCRA, the agency shall report on such toxic pollutants annually under the provisions of section 3-304 of this order, if practicable, or through an agency report that is made available to the public.

(d) The head of each Federal agency shall ensure that each of its covered facilities develops a written pollution prevention plan no later than the end of 1995, which sets forth the facility's contribution to the goal established in section 3-302(a) of this order. Federal agencies shall conduct assessments of their facilities as necessary to ensure development of such plans and of the facilities' pollution prevention programs.

3-303. *Acquisition and Procurement Goals.* (a) Each Federal agency shall establish a plan and goals for eliminating or reducing the unnecessary acquisition by that agency of products containing extremely hazardous substances or toxic chemicals. Similarly, each Federal agency shall establish a plan and goal for voluntarily reducing its' own manufacturing, processing, and use of extremely hazardous substances and toxic chemicals. Priorities shall be developed by Federal agencies, in coordination with EPA, for implementing this section.

(b) Within 24 months of the date of this order, the Department of Defense (DOD) and the General Services Administration (GSA), and other agencies, as appropriate, shall review their agency's standardized documents, including specifications and standards, and identify opportunities to eliminate or reduce the use by their agency of extremely hazardous substances and toxic chemicals, consistent with the safety and reliability requirements of their agency mission. The EPA shall assist agencies in meeting the requirements of this section, including identifying substitutes and setting priorities for these reviews. By 1999, DOD, GSA and other affected agencies shall make all appropriate revisions to these specifications and standards.

(c) Any revisions to the Federal Acquisition Regulation (FAR) necessary to implement this order shall be made within 24 months of the date of this order.

(d) Federal agencies are encouraged to develop and test innovative pollution prevention technologies at their facilities in order to encourage the development of strong markets for such technologies. Partnerships should be encouraged between industry, Federal agencies, Government laboratories, academia, and others to assess and deploy innovative environmental technologies for domestic use and for markets abroad.

3-304. *Toxics Release Inventory/Pollution Prevention Act Reporting.* (a) The head of each Federal agency shall comply with the provisions set forth in section 313 of EPCRA, section 6607 of PPA, all implementing regulations, and future amendments to these authorities, in light of applicable guidance as provided by EPA.

(b) The head of each Federal agency shall comply with these provisions without regard to the Standard Industrial Classification (SIC) delineations that apply to the Federal agency's facilities, and such reports shall be for all releases, transfers, and wastes at such Federal agency's facility without regard to the SIC code of the activity leading to the release, transfer, or waste. All other existing statutory or regulatory limitations or exemptions on the application of EPCRA section 313 shall apply to the reporting requirements set forth in section 3-304(a) of this order.

(c) The first year of compliance shall be no later than for the 1994 calendar year with reports due on or before July 1, 1995

3-305. *Emergency Planning and Community Right-to-Know Reporting Responsibilities.* The head of each Federal agency shall comply with the provisions set forth in sections 301 through 312 of EPCRA, all implementing regulations, and future amendments to these authorities in light of any applicable guidance as provided by EPA. Effective dates for compliance shall be: (a) With respect to the provisions of section 302 of EPCRA emergency planning notification shall be made no later than 7 months after the date of this order.

(b) With respect to the provisions of section 303 of EPCRA all information necessary for the applicable Local Emergency Planning Committee (LEPC's) to prepare or revise local Emergency Response Plans shall be provided no later than 1 year after the date of this order.

(c) To the extent that a facility is required to maintain Material Safety Data Sheets under any provisions of law or Executive order, information required under section 311 of EPCRA shall be submitted no later than 1 year after the date of this order, and the first year of compliance with section 312 shall be no later than the 1994 calendar year, with reports due on or before March 1, 1995.

(d) The provisions of section 304 of EPCRA shall be effective beginning January 1, 1994.

(e) These compliance dates are not intended to delay implementation of earlier timetables already agreed to by Federal agencies and are inapplicable to the extent they interfere with those timetables.

Sec. 4–4. *Agency Coordination.*

4–401. By February 1, 1994, the Administrator shall convene an interagency Task Force composed of the Administrator, the Secretaries of Commerce, Defense, and Energy, the Administrator of General Services, the Administrator of the Office of Procurement Policy in the Office of Management and Budget, and such other agency officials as deemed appropriate based upon lists of potential participants submitted to the Administrator pursuant to this section by the agency head. Each agency head may designate other senior agency officials to act in his/her stead, where appropriate. The Task Force will assist the agency heads in the implementation of the activities required under this order.

4–402. Federal agencies subject to the requirements of this order shall submit annual progress reports to the Administrator beginning on October 1, 1995. These reports all include a description of the progress that the agency has made in complying with all aspects of this order, including the pollution reductions requirements. This reporting requirement shall expire after the report due on October 1, 2001.

4–403. *Technical Advice.* Upon request and to the extent practicable, the Administrator shall provide technical advice and assistance to Federal agencies in order to foster full compliance with this order. In addition, to the extent practicable, all Federal agencies subject to this order shall provide technical assistance, if requested, to LEPC's in their development of emergency response plans and in fulfillment of their community right-to-know and risk reduction responsibilities.

4–404. Federal agencies shall place high priority on obtaining funding and resources needed for implementing all aspects of this order, including the pollution prevention strategies, plans, and assessments required by this order, by identifying, requesting, and allocating funds through line-item or direct funding requests. Federal agencies shall make such requests as required in the Federal Agency Pollution Prevention and Abatement Planning Process and through agency budget requests as outlined in Office of Management and Budget (OMB) Circulars A-106 and A-11, respectively. Federal agencies should apply to the maximum extent practicable, a life cycle analysis and total cost accounting principles to all projects needed to meet the requirements of this order.

4–405. *Federal Government Environmentall Challenge Program.* The Administrator shall establish a "Federal Government Environmental Challenge Program" to recognize outstanding environmental management performance in Federal agencies and facilities. The program shall consist of two components that challenge Federal agencies; (a) to agree to a code of environmental principles to be developed by EPA, in cooperation with other agencies, that emphasizes pollution prevention, sustainable development and state of-the-art environmental management programs, and (b) to submit applications to EPA for individual Federal agency facilities for recognition as "Model Installations." The program shall also include a means for recognizing individual Federal employees who demonstrate outstanding leadership in pollution prevention.

Sec 5–5. *Compliance.*

5-501. By December 31,1993, the head of each Federal agency shall provide the Administrator with a preliminary list of facilities that potentially meet the requirements for reporting under the threshold provisions of EPCRA, PPA, and this order.

5-502. The head of each Federal agency is responsible for ensuring that such agency take all necessary actions to prevent pollution in accordance with this order, and for that agency's compliance with the provisions of EPCRA and PPA. Compliance with EPCRA and PPA means compliance with the same substantive, procedural, and other statutory and regulatory requirements that would apply to a private person. Nothing in this order shall be construed as making the provisions of sections 325 and 326 of EPCRA applicable to any Federal agency or facility, except to the extent that such Federal agency or facility would independently be subject to such provisions. EPA shall consult with Federal agencies, if requested, to determine the applicability of this order to particular agency facilities.

5-503. Each Federal agency subject to this order shall conduct internal reviews and audits, and take such other steps, as may be necessary to monitor compliance with sections 3-304 and 3-305 of this order.

5-504. The Administrator, in consultation with the heads of Federal agencies, may conduct such reviews and inspections as may be necessary to monitor compliance with sections 3-304 and 3-305 of this order. Except as excluded under section 6–601 of this order, all Federal agencies are encouraged to cooperate fully with the efforts of the Administrator to ensure compliance with sections 3-304 and 3-305 of this order.

5-505. Federal agencies are further encouraged to comply with all state and local right-to-know and pollution prevention requirements to the extent that compliance with such laws and requirements is not otherwise already mandated.

5-506. Whenever the Administrator notifies a Federal agency that it is not in compliance with an applicable provision of this order, the Federal agency shall achieve compliance as promptly as is practicable.

5-507. The EPA shall report annually to tho President on Federal agency compliance with the provisions of section 3-304 of this order.

5-508. To the extent permitted by law and unless such documentation is withheld pursuant to section 6–601 of this order, the public shall be afforded ready access to all strategies, plans, and reports required to be prepared by Federal agencies under this order by the agency preparing the strategy, plan, or report. When the reports are submitted to EPA, EPA shall compile the strategies, plans, and reports and make them publicly available as well. Federal agencies are encouraged to provide such strategies, plans, and reports to the State and local authorities where their facilities are located for an additional point of access to the public.

Sec. 6-6. *Exemption.*

6-601. In the interest of national security, the head of a Federal agency may request from the President an exemption from complying with the provisions of any or all aspects of this order for particular Federal agency facilities, provided that the procedures set forth in section 120(j)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. 9620(j)(1)), are followed. To the maximum extent practicable, and without compromising national security, all Federal agencies shall strive to comply with the purposes, goals, and implementation steps set forth in this order.

Sec. 7-7. *General Provisions.*

7-701. Nothing in this order shall create any right or benefit, substantive or procedural, enforceable by a party against the United States, its agencies or instrumentalities, its officers or employees, or any other person.

William J. Clinton

THE WHITE HOUSE,

August 3, 1993.

[FR Doc/ 93-19069

Filed 8-4-93; 4:37 pm]

Billing code 3195-01-P

Appendix L

Title 40, CFR, 1995 Revision, Part 112.7;
Oil Pollution Prevention

late the requirements of this part 112 by failing or refusing to comply with any of the provisions of § 112.3, § 112.4 or § 112.5 shall be liable for a civil penalty of not more than $5,000 for each day such violation continues. Civil penalties shall be imposed in accordance with procedures set out in part 114 of this subchapter D.

[57 FR 52705, Nov. 4, 1992]

§ 112.7 Guidelines for the preparation and implementation of a Spill Prevention Control and Countermeasure Plan.

The SPCC Plan shall be a carefully thought-out plan, prepared in accordance with good engineering practices, and which has the full approval of management at a level with authority to commit the necessary resources. If the plan calls for additional facilities or procedures, methods, or equipment not yet fully operational, these items should be discussed in separate paragraphs, and the details of installation and operational start-up should be explained separately. The complete SPCC Plan shall follow the sequence outlined below, and include a discussion of the facility's conformance with the appropriate guidelines listed:

(a) A facility which has experienced one or more spill events within twelve months prior to the effective date of this part should include a written description of each such spill, corrective action taken and plans for preventing recurrence.

(b) Where experience indicates a reasonable potential for equipment failure (such as tank overflow, rupture, or leakage), the plan should include a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each major type of failure.

(c) Appropriate containment and/or diversionary structures or equipment to prevent discharged oil from reaching a navigable water course should be provided. One of the following preventive systems or its equivalent should be used as a minimum:

(1) Onshore facilities:

(i) Dikes, berms or retaining walls sufficiently impervious to contain spilled oil;

(ii) Curbing;

(iii) Culverting, gutters or other drainage systems;

(iv) Weirs, booms or other barriers;

(v) Spill diversion ponds;

(vi) Retention ponds;

(vii) Sorbent materials.

(2) Offshore facilities:

(i) Curbing, drip pans;

(ii) Sumps and collection systems.

(d) When it is determined that the installation of structures or equipment listed in § 112.7(c) to prevent discharged oil from reaching the navigable waters is not practicable from any onshore or offshore facility, the owner or operator should clearly demonstrate such impracticability and provide the following:

(1) A strong oil spill contingency plan following the provision of 40 CFR part 109.

(2) A written commitment of manpower, equipment and materials required to expeditiously control and remove any harmful quantity of oil discharged.

(e) In addition to the minimal prevention standards listed under § 112.7(c), sections of the Plan should include a complete discussion of conformance with the following applicable guidelines, other effective spill prevention and containment procedures (or, if more stringent, with State rules, regulations and guidelines):

(1) *Facility drainage (onshore); (excluding production facilities).* (i) Drainage from diked storage areas should be restrained by valves or other positive means to prevent a spill or other excessive leakage of oil into the drainage system or inplant effluent treatment system, except where plan systems are designed to handle such leakage. Diked areas may be emptied by pumps or ejectors; however, these should be manually activated and the condition of the accumulation should be examined before starting to be sure no oil will be discharged into the water.

(ii) Flapper-type drain valves should not be used to drain diked areas. Valves used for the drainage of diked areas should, as far as practical, be of manual, open-and-closed design. When plant drainage drains directly into water courses and not into wastewater treatment plants, retained storm water should be inspected as provided in

paragraphs (e)(2)(iii) (B), (C) and (D) of this section before drainage.

(iii) Plant drainage systems from undiked areas should, if possible, flow into ponds, lagoons or catchment basins, designed to retain oil or return it to the facility. Catchment basins should not be located in areas subject to periodic flooding.

(iv) If plant drainage is not engineered as above, the final discharge of all in-plant ditches should be equipped with a diversion system that could, in the event of an uncontrolled spill, return the oil to the plant.

(v) Where drainage waters are treated in more than one treatment unit, natural hydraulic flow should be used. If pump transfer is needed, two "lift" pumps should be provided, and at least one of the pumps should be permanently installed when such treatment is continuous. In any event, whatever techniques are used facility drainage systems should be adequately engineered to prevent oil from reaching navigable waters in the event of equipment failure or human error at the facility.

(2) *Bulk storage tanks (onshore); (excluding production facilities).* (i) No tank should be used for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature, etc.

(ii) All bulk storage tank installations should be constructed so that a secondary means of containment is provided for the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation. Diked areas should be sufficiently impervious to contain spilled oil. Dikes, containment curbs, and pits are commonly employed for this purpose, but they may not always be appropriate. An alternative system could consist of a complete drainage trench enclosure arranged so that a spill could terminate and be safely confined in an inplant catchment basin or holding pond.

(iii) Drainage of rainwater from the diked area into a storm drain or an effluent discharge that empties into an open water course, lake, or pond, and bypassing the in-plant treatment system may be acceptable if:

(A) The bypass valve is normally sealed closed.

(B) Inspection of the run-off rain water ensures compliance with applicable water quality standards and will not cause a harmful discharge as defined in 40 CFR part 110.

(C) The bypass valve is opened, and resealed following drainage under responsible supervision.

(D) Adequate records are kept of such events.

(iv) Buried metallic storage tanks represent a potential for undetected spills. A new buried installation should be protected from corrosion by coatings, cathodic protection or other effective methods compatible with local soil conditions. Such buried tanks should at least be subjected to regular pressure testing.

(v) Partially buried metallic tanks for the storage of oil should be avoided, unless the buried section of the shell is adequately coated, since partial burial in damp earth can cause rapid corrosion of metallic surfaces, especially at the earth/air interface.

(vi) Aboveground tanks should be subject to periodic integrity testing, taking into account tank design (floating roof, etc.) and using such techniques as hydrostatic testing, visual inspection or a system of non-destructive shell thickness testing. Comparison records should be kept where appropriate, and tank supports and foundations should be included in these inspections. In addition, the outside of the tank should frequently be observed by operating personnel for signs of deterioration, leaks which might cause a spill, or accumulation of oil inside diked areas.

(vii) To control leakage through defective internal heating coils, the following factors should be considered and applied, as appropriate.

(A) The steam return or exhaust lines from internal heating coils which discharge into an open water course should be monitored for contamination, or passed through a settling tank, skimmer, or other separation or retention system.

(B) The feasibility of installing an external heating system should also be considered.

(viii) and old tank installations should, as far as practical, be fail-safe engineered or updated into a fail-safe engineered installation to avoid spills. Consideration should be given to providing one or more of the following devices:

(A) High liquid level alarms with an audible or visual signal at a constantly manned operation or surveillance station; in smaller plants an audible air vent may suffice.

(B) Considering size and complexity of the facility, high liquid level pump cutoff devices set to stop flow at a predetermined tank content level.

(C) Direct audible or code signal communication between the tank gauger and the pumping station.

(D) A fast response system for determining the liquid level of each bulk storage tank such as digital computers, telepulse, or direct vision gauges or their equivalent.

(E) Liquid level sensing devices should be regularly tested to insure proper operation.

(ix) Plant effluents which are discharged into navigable waters should have disposal facilities observed frequently enough to detect possible system upsets that could cause an oil spill event.

(x) Visible oil leaks which result in a loss of oil from tank seams, gaskets, rivets and bolts sufficiently large to cause the accumulation of oil in diked areas should be promptly corrected.

(xi) Mobile or portable oil storage tanks (onshore) should be positioned or located so as to prevent spilled oil from reaching navigable waters. A secondary means of containment, such as dikes or catchment basins, should be furnished for the largest single compartment or tank. These facilities should be located where they will not be subject to periodic flooding or washout.

(3) *Facility transfer operations, pumping, and in-plant process (onshore); (excluding production facilities).* (i) Buried piping installations should have a protective wrapping and coating and should be cathodically protected if soil conditions warrant. If a section of buried line is exposed for any reason, it should be carefully examined for deterioration. If corrosion damage is found, additional examination and corrective action should be taken as indicated by the magnitude of the damage. An alternative would be the more frequent use of exposed pipe corridors or galleries.

(ii) When a pipeline is not in service, or in standby service for an extended time the terminal connection at the transfer point should be capped or blank-flanged, and marked as to origin.

(iii) Pipe supports should be properly designed to minimize abrasion and corrosion and allow for expansion and contraction.

(iv) All aboveground valves and pipelines should be subjected to regular examinations by operating personnel at which time the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces should be assessed. In addition, periodic pressure testing may be warranted for piping in areas where facility drainage is such that a failure might lead to a spill event.

(v) Vehicular traffic granted entry into the facility should be warned verbally or by appropriate signs to be sure that the vehicle, because of its size, will not endanger above ground piping.

(4) *Facility tank car and tank truck loading/unloading rack (onshore).* (i) Tank car and tank truck loading/unloading procedures should meet the minimum requirements and regulation established by the Department of Transportation.

(ii) Where rack area drainage does not flow into a catchment basin or treatment facility designed to handle spills, a quick drainage system should be used for tank truck loading and unloading areas. The containment system should be designed to hold at least maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded in the plant.

(iii) An interlocked warning light or physical barrier system, or warning signs, should be provided in loading/unloading areas to prevent vehicular departure before complete disconnect of flexible or fixed transfer lines.

(iv) Prior to filling and departure of any tank car or tank truck, the lowermost drain and all outlets of such vehicles should be closely examined for leakage, and if necessary, tightened,

adjusted, or replaced to prevent liquid leakage while in transit.

(5) *Oil production facilities (onshore)*— (i) *Definition.* An onshore production facility may include all wells, flowlines, separation equipment, storage facilities, gathering lines, and auxiliary non-transportation-related equipment and facilities in a single geographical oil or gas field operated by a single operator.

(ii) *Oil production facility (onshore) drainage.* (A) At tank batteries and central treating stations where an accidental discharge of oil would have a reasonable possibility of reaching navigable waters, the dikes or equivalent required under §112.7(c)(1) should have drains closed and sealed at all times except when rainwater is being drained. Prior to drainage, the diked area should be inspected as provided in paragraphs (e)(2)(iii) (B), (C), and (D) of this section. Accumulated oil on the rainwater should be picked up and returned to storage or disposed of in accordance with approved methods.

(B) Field drainage ditches, road ditches, and oil traps, sumps or skimmers, if such exist, should be inspected at regularly scheduled intervals for accumulation of oil that may have escaped from small leaks. Any such accumulations should be removed.

(iii) *Oil production facility (onshore) bulk storage tanks.* (A) No tank should be used for the storage of oil unless its material and construction are compatible with the material stored and the conditions of storage.

(B) All tank battery and central treating plant installations should be provided with a secondary means of containment for the entire contents of the largest single tank if feasible, or alternate systems such as those outlined in §112.7(c)(1). Drainage from undiked areas should be safely confined in a catchment basin or holding pond.

(C) All tanks containing oil should be visually examined by a competent person for condition and need for maintenance on a scheduled periodic basis. Such examination should include the foundation and supports of tanks that are above the surface of the ground.

(D) New and old tank battery installations should, as far as practical, be fail-safe engineered or updated into a fail-safe engineered installation to prevent spills. Consideration should be given to one or more of the following:

(*1*) Adequate tank capacity to assure that a tank will not overfill should a pumper/gauger be delayed in making his regular rounds.

(*2*) Overflow equalizing lines between tanks so that a full tank can overflow to an adjacent tank.

(*3*) Adequate vacuum protection to prevent tank collapse during a pipeline run.

(*4*) High level sensors to generate and transmit an alarm signal to the computer where facilities are a part of a computer production control system.

(iv) *Facility transfer operations, oil production facility (onshore).* (A) All above ground valves and pipelines should be examined periodically on a scheduled basis for general condition of items such as flange joints, valve glands and bodies, drip pans, pipeline supports, pumping well polish rod stuffing boxes, bleeder and gauge valves.

(B) Salt water (oil field brine) disposal facilities should be examined often, particularly following a sudden change in atmospheric temperature to detect possible system upsets that could cause an oil discharge.

(C) Production facilities should have a program of flowline maintenance to prevent spills from this source. The program should include periodic examinations, corrosion protection, flowline replacement, and adequate records, as appropriate, for the individual facility.

(6) *Oil drilling and workover facilities (onshore).* (i) Mobile drilling or workover equipment should be positioned or located so as to prevent spilled oil from reaching navigable waters.

(ii) Depending on the location, catchment basins or diversion structures may be necessary to intercept and contain spills of fuel, crude oil, or oily drilling fluids.

(iii) Before drilling below any casing string or during workover operations, a blowout prevention (BOP) assembly and well control system should be installed that is capable of controlling any well head pressure that is expected to be encountered while that BOP assembly is on the well. Casing and BOP installations should be in accordance

with State regulatory agency requirements.

(7) *Oil drilling, production, or workover facilities (offshore).* (i) Definition: "An oil drilling, production or workover facility (offshore)" may include all drilling or workover equipment, wells, flowlines, gathering lines, platforms, and auxiliary nontransportation-related equipment and facilities in a single geographical oil or gas field operated by a single operator.

(ii) Oil drainage collection equipment should be used to prevent and control small oil spillage around pumps, glands, valves, flanges, expansion joints, hoses, drain lines, separators, treaters, tanks, and allied equipment. Drains on the facility should be controlled and directed toward a central collection sump or equivalent collection system sufficient to prevent discharges of oil into the navigable waters of the United States. Where drains and sumps are not practicable oil contained in collection equipment should be removed as often as necessary to prevent overflow.

(iii) For facilities employing a sump system, sump and drains should be adequately sized and a spare pump or equivalent method should be available to remove liquid from the sump and assure that oil does not escape. A regular scheduled preventive maintenance inspection and testing program should be employed to assure reliable operation of the liquid removal system and pump start-up device. Redundant automatic sump pumps and control devices may be required on some installations.

(iv) In areas where separators and treaters are equipped with dump valves whose predominant mode of failure is in the closed position and pollution risk is high, the facility should be specially equipped to prevent the escape of oil. This could be accomplished by extending the flare line to a diked area if the separator is near shore, equipping it with a high liquid level sensor that will automatically shut-in wells producing to the separator, parallel redundant dump valves, or other feasible alternatives to prevent oil discharges.

(v) Atmospheric storage or surge tanks should be equipped with high liquid level sensing devices or other acceptable alternatives to prevent oil discharges.

(vi) Pressure tanks should be equipped with high and low pressure sensing devices to activate an alarm and/or control the flow or other acceptable alternatives to prevent oil discharges.

(vii) Tanks should be equipped with suitable corrosion protection.

(viii) A written procedure for inspecting and testing pollution prevention equipment and systems should be prepared and maintained at the facility. Such procedures should be included as part of the SPCC Plan.

(ix) Testing and inspection of the pollution prevention equipment and systems at the facility should be conducted by the owner or operator on a scheduled periodic basis commensurate with the complexity, conditions and circumstances of the facility or other appropriate regulations.

(x) Surface and subsurface well shut-in valves and devices in use at the facility should be sufficiently described to determine method of activation or control, e.g., pressure differential, change in fluid or flow conditions, combination of pressure and flow, manual or remote control mechanisms. Detailed records for each well, while not necessarily part of the plan should be kept by the owner or operator.

(xi) Before drilling below any casing string, and during workover operations a blowout preventer (BOP) assembly and well control system should be installed that is capable of controlling any well-head pressure that is expected to be encountered while that BOP assembly is on the well. Casing and BOP installations should be in accordance with State regulatory agency requirements.

(xii) Extraordinary well control measures should be provided should emergency conditions, including fire, loss of control and other abnormal conditions, occur. The degree of control system redundancy should vary with hazard exposure and probable consequences of failure. It is recommended that surface shut-in systems have redundant or "fail close" valving. Subsurface safety valves may not be needed in producing wells that will not flow but should be installed as required by applicable State regulations.

(xiii) In order that there will be no misunderstanding of joint and separate duties and obligations to perform work in a safe and pollution free manner, written instructions should be prepared by the owner or operator for contractors and subcontractors to follow whenever contract activities include servicing a well or systems appurtenant to a well or pressure vessel. Such instructions and procedures should be maintained at the offshore production facility. Under certain circumstances and conditions such contractor activities may require the presence at the facility of an authorized representative of the owner or operator who would intervene when necessary to prevent a spill event.

(xiv) All manifolds (headers) should be equipped with check valves on individual flowlines.

(xv) If the shut-in well pressure is greater than the working pressure of the flowline and manifold valves up to and including the header valves associated with that individual flowline, the flowline should be equipped with a high pressure sensing device and shut-in valve at the wellhead unless provided with a pressure relief system to prevent over pressuring.

(xvi) All pipelines appurtenant to the facility should be protected from corrosion. Methods used, such as protective coatings or cathodic protection, should be discussed.

(xvii) Sub-marine pipelines appurtenant to the facility should be adequately protected against environmental stresses and other activities such as fishing operations.

(xviii) Sub-marine pipelines appurtenant to the facility should be in good operating condition at all times and inspected on a scheduled periodic basis for failures. Such inspections should be documented and maintained at the facility.

(8) *Inspections and records.* Inspections required by this part should be in accordance with written procedures developed for the facility by the owner or operator. These written procedures and a record of the inspections, signed by the appropriate supervisor or inspector, should be made part of the SPCC Plan and maintained for a period of three years.

(9) *Security (excluding oil production facilities).* (i) All plants handling, processing, and storing oil should be fully fenced, and entrance gates should be locked and/or guarded when the plant is not in production or is unattended.

(ii) The master flow and drain valves and any other valves that will permit direct outward flow of the tank's content to the surface should be securely locked in the closed position when in non-operating or non-standby status.

(iii) The starter control on all oil pumps should be locked in the "off" position or located at a site accessible only to authorized personnel when the pumps are in a non-operating or non-standby status.

(iv) The loading/unloading connections of oil pipelines should be securely capped or blank-flanged when not in service or standby service for an extended time. This security practice should also apply to pipelines that are emptied of liquid content either by draining or by inert gas pressure.

(v) Facility lighting should be commensurate with the type and location of the facility. Consideration should be given to: (A) Discovery of spills occurring during hours of darkness, both by operating personnel, if present, and by non-operating personnel (the general public, local police, etc.) and (B) prevention of spills occurring through acts of vandalism.

(10) *Personnel, training and spill prevention procedures.* (i) Owners or operators are responsible for properly instructing their personnel in the operation and maintenance of equipment to prevent the discharges of oil and applicable pollution control laws, rules and regulations.

(ii) Each applicable facility should have a designated person who is accountable for oil spill prevention and who reports to line management.

(iii) Owners or operators should schedule and conduct spill prevention briefings for their operating personnel at intervals frequent enough to assure adequate understanding of the SPCC Plan for that facility. Such briefings should highlight and describe known spill events or failures, malfunctioning

components, and recently developed precautionary measures.

§ 112.20 Facility response plans.

(a) The owner or operator of any non-transportation-related onshore facility that, because of its location, could reasonably be expected to cause substantial harm to the environment by discharging oil into or on the navigable waters or adjoining shorelines shall prepare and submit a facility response plan to the Regional Administrator, according to the following provisions:

(1) For the owner or operator of a facility in operation on or before February 18, 1993 who is required to prepare and submit a response plan under 33 U.S.C. 1321(j)(5), the Oil Pollution Act of 1990 (Pub. L. 101-380, 33 U.S.C. 2701 *et seq.*) requires the submission of a response plan that satisfies the requirements of 33 U.S.C. 1321(j)(5) no later than February 18, 1993.

(i) The owner or operator of an existing facility that was in operation on or before February 18, 1993 who submitted a response plan by February 18, 1993 shall revise the response plan to satisfy the requirements of this section and resubmit the response plan or updated portions of the response plan to the Regional Administrator by February 18, 1995.

(ii) The owner or operator of an existing facility in operation on or before February 18, 1993 who failed to submit a response plan by February 18, 1993 shall prepare and submit a response plan that satisfies the requirements of this section to the Regional Administrator before August 30, 1994.

(2) The owner or operator of a facility in operation on or after August 30, 1994 that satisfies the criteria in paragraph (f)(1) of this section or that is notified by the Regional Administrator pursuant to paragraph (b) of this section shall prepare and submit a facility response plan that satisfies the requirements of this section to the Regional Administrator.

(i) For a facility that commenced operations after February 18, 1993 but prior to August 30, 1994, and is required to prepare and submit a response plan based on the criteria in paragraph (f)(1) of this section, the owner or operator shall submit the response plan or updated portions of the response plan, along with a completed version of the response plan cover sheet contained in Appendix F to this part, to the Regional Administrator prior to August 30, 1994.

(ii) For a newly constructed facility that commences operation after August 30, 1994, and is required to prepare and submit a response plan based on the criteria in paragraph (f)(1) of this section, the owner or operator shall submit the response plan, along with a completed version of the response plan cover sheet contained in Appendix F to this part, to the Regional Administrator prior to the start of operations (adjustments to the response plan to reflect changes that occur at the facility during the start-up phase of operations must be submitted to the Regional Administrator after an operational trial period of 60 days).

(iii) For a facility required to prepare and submit a response plan after August 30, 1994, as a result of a planned change in design, construction, operation, or maintenance that renders the facility subject to the criteria in paragraph (f)(1) of this section, the owner or operator shall submit the response plan, along with a completed version of the response plan cover sheet contained in Appendix F to this part, to the Regional Administrator before the portion of the facility undergoing change commences operations (adjustments to the response plan to reflect changes that occur at the facility during the start-up phase of operations must be submitted to the Regional Administrator after an operational trial period of 60 days).

(iv) For a facility required to prepare and submit a response plan after August 30, 1994, as a result of an unplanned event or change in facility characteristics that renders the facility subject to the criteria in paragraph (f)(1) of this section, the owner or operator shall submit the response plan, along with a completed version of the response plan cover sheet contained in Appendix F to this part, to the Regional Administrator within six months of the unplanned event or change.

(3) In the event the owner or operator of a facility that is required to prepare and submit a response plan uses an alternative formula that is comparable to one contained in Appendix C to this part to evaluate the criterion in paragraph (f)(1)(ii)(B) or (f)(1)(ii)(C) of this section, the owner or operator shall attach documentation to the response plan cover sheet contained in Appendix F to this part that demonstrates the reliability and analytical soundness of the alternative formula.

(b)(1) The Regional Administrator may at any time require the owner or operator of any non-transportation-related onshore facility to prepare and submit a facility response plan under this section after considering the factors in paragraph (f)(2) of this section. If such a determination is made, the Regional Administrator shall notify the facility owner or operator in writing and shall provide a basis for the determination. If the Regional Administrator notifies the owner or operator in writing of the requirement to prepare and submit a response plan under this section, the owner or operator of the facility shall submit the response plan to the Regional Administrator within six months of receipt of such written notification.

(2) The Regional Administrator shall review plans submitted by such facilities to determine whether the facility could, because of its location, reasonably be expected to cause significant and substantial harm to the environment by discharging oil into or on the navigable waters or adjoining shorelines.

(c) The Regional Administrator shall determine whether a facility could, because of its location, reasonably be expected to cause significant and substantial harm to the environment by discharging oil into or on the navigable waters or adjoining shorelines, based on the factors in paragraph (f)(3) of this section. If such a determination is made, the Regional Administrator shall notify the owner or operator of the facility in writing and:

(1) Promptly review the facility response plan;

(2) Require amendments to any response plan that does not meet the requirements of this section;

(3) Approve any response plan that meets the requirements of this section; and

(4) Review each response plan periodically thereafter on a schedule established by the Regional Administrator provided that the period between plan reviews does not exceed five years.

(d)(1) The owner or operator of a facility for which a response plan is required under this part shall revise and resubmit revised portions of the response plan within 60 days of each facility change that materially may affect the response to a worst case discharge, including:

(i) A change in the facility's configuration that materially alters the information included in the response plan;

(ii) A change in the type of oil handled, stored, or transferred that materially alters the required response resources;

(iii) A material change in capabilities of the oil spill removal organization(s) that provide equipment and personnel to respond to discharges of oil described in paragraph (h)(5) of this section;

(iv) A material change in the facility's spill prevention and response equipment or emergency response procedures; and

(v) Any other changes that materially affect the implementation of the response plan.

(2) Except as provided in paragraph (d)(1) of this section, amendments to personnel and telephone number lists included in the response plan and a change in the oil spill removal organization(s) that does not result in a material change in support capabilities do not require approval by the Regional Administrator. Facility owners or operators shall provide a copy of such changes to the Regional Administrator as the revisions occur.

(3) The owner or operator of a facility that submits changes to a response plan as provided in paragraph (d)(1) or (d)(2) of this section shall provide the EPA-issued facility identification number (where one has been assigned) with the changes.

(4) The Regional Administrator shall review for approval changes to a response plan submitted pursuant to paragraph (d)(1) of this section for a fa-

Appendix M

Glossary

GLOSSARY

Abbreviations:

AR	-Army Regulation
AST	-Above Ground Storage Tank
CAA	-Clean Air Act
CERCLA	-Comprehensive Environmental Response, Compensation, Liability Act
CFR	-Code of Federal Regulations
CWA	-Clean Water Act
DES	-Department of Environmental Services
DLA	-Defense Logistics Agency
DOD	-Department of Defense
ECC	-Environmental Compliance Coordinator
EM	-Engineering Manual
EO	-Executive Order
EPA	-Environmental Protection Agency
EPCRA	-Emergency Planning and Community Right-to-Know Act
ERGO	-Environmental Review Guide for Operations
FY	-Fiscal Year
GSA	-General Services Administration
MEK	-Methyl Ethyl Ketone
MSDS	-Material Safety Data Sheets
NED	-New England Division
NFPA	-National Fire Protection Association
NGVD	-National Geodetic Vertical Datum
NH	-New Hampshire
P2	-Pollution Prevention

PCBs -Polychlorinated Biphenols

RCRA -Resource, Conservation, and Recovery Act

RQ -Reportable Quantity

SCP -Spill Contingency Plan

SPCCP -Spill Prevention, Control, and Countermeasure Plan

TRI -Toxics Release Inventory

TSD -Treatment, Storage, and Disposal Facility

USACE -U.S. Army Corps of Engineers

UST -Underground Storage Tank

VOCs -Volatile Organic Compounds

Terms:

Disposal: The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such waste (or any constituent thereof) may enter the environment or be emitted into the air or discharged into any waters, including groundwater.

Environment: Any one of the following: navigable waters, near-shore and open waters and any surface waters, groundwater, drinking water supply, land surface or subsurface area, and ambient air.

Hazardous Waste: The Resource Conservation and Recovery Act (RCRA) defines hazardous waste as a solid waste (including liquids and gases), or a combination or solid wastes which may, because of its quantity, concentration, or physical, chemical, or infectious characteristics:

a. cause or significantly contribute to an increase in mortality or in serious irreversible, or incapacitating illness; or

b. pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Certain types of solid wastes are excluded from regulation as hazardous waste. See 40 CFR 261.4 for the complete listing of exclusions.

Hazardous Substance: For the purpose of this plan, a hazardous substance is any one of the following:

a. Any substance designated pursuant to Section 311 (b) (2) (A) of the CWA.

b. Any element, compound, mixture, solution, or substance designated pursuant to Section 102 or 101 (14) of the CERCLA (see Appendix D3)

c. Any hazardous air pollutant under Section 112 of the CAA.

The term does not include (1) petroleum, including crude oil or any fraction thereof, which is not specifically listed or designated as a hazardous substance in the above definition; or (2) natural gas, natural gas liquids, liquified natural gas, or synthetic gas used for fuel (or mixtures of natural gas and such synthetic gas).

Manifest: The shipping document EPA Form 8700-22, and if necessary, EPA Form 8700-22A, originated, signed, and distributed in accordance with the instructions supplied with the manifest form and applicable state requirements.

National Geodetic Vertical Datum: Formerly called "Sea Level Datum of 1929," the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, but it does not necessarily represent local mean sea level at any particular place.

Oil: Oil of any kind or in any form, including but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.

Reportable Concentration: The threshold (minimum) concentration in soil or groundwater which requires notification to the DEP.

Reportable Quantity: The threshold (minimum) quantity for a CERCLA hazardous substance spill established in Table 302.4 of 40 CFR part 302.

Secondary Containment: Any measure which will retain a spill of the entire contents of the primary container for a sufficient period so that it can be collected or removed without contaminating the environment. Containment must be sufficiently impermeable to contain any spilled material and is normally sized for additional freeboard to allow for precipitation. Any spill that would occur on an impervious surface (e.g. concrete floor or bituminous parking lot) that did not contaminate the environment would be within secondary containment. Secondary containment

includes basins, berms, catchment areas, curbing, dikes, drip pans, relief vessels, retaining walls, vaults, and similar devices.

Sheen: An iridescent appearance on the surface of water, normally caused by the presence of oil.

Solid Waste: Waste that includes garbage, refuse, and sludge as well as any solid, semi-solid, liquid, or contained gaseous material that is discarded. A discarded material is one that has been determined to be an inherently waste-like material by the EPA Administrator. Under certain circumstances, recycled materials are considered discarded materials (and therefore solid wastes) if they are used in a manner constituting disposal, burned for energy recovery, reclaimed, or accumulated speculatively. Certain wastes are excluded from being classified as solid wastes. See 40 CFR 261.2 for wastes that are excluded.

Spill: A generic term which encompasses the accidental or deliberate but unpermitted discharge or release of a pollutant.

Appendix N

References

REFERENCES

Title 29, CFR, 1994 rev, Part 1910.106; Flammable and Combustable Liquids

Title 40, CFR, 1994 rev, Part 112; Oil Pollution Prevention

Title 40, CFR, 1994 rev, Part 114; Civil Penalties for Violation of Oil Pollution Prevention Regulations

Title 40, CFR, 1994 rev, Part 116; Designation of Hazardous Substances

Title 40, CFR, 1994 rev, Part 117; Determination of Reportable Quantities for Hazardous Substances

Title 40, CFR, 1994 rev, Part 300; National Oil and Hazardous Substances Pollution Contingency Plan

Title 40, CFR, 1994 rev, Part 302; Designation, Reportable Quantities, and Notification

Title 40, CFR, 1994 rev, Part 355; Emergency Planning and Notification

Title 40, CFR, 1994 rev, Part 372; Toxic Chemical Release Reporting: Community Right-To-Know

State of New Hampshire Hazardous Waste Rules, Env-Wm, August 1994

EM 385-1-1, October 1992, Safety and Health Requirements Manual

AR 200-1, April 1990; Environmental Protection Enhancement

Executive Order 12856, August 3, 1993, Federal Compliance and Right-to-Know Laws and Pollution Prevention Requirements

NFPA 30, 1990 Edition, Flammable and Combustible Liquids Code

Appendix O

Amendments/Changes to P2 Plan